Program of the Twelfth Symposium on Antarctic Meteorites, held at the National Institute of Polar Research, Tokyo, June 8–10, 1987

1. Collection of Yamato and Sør Rondane meteorites in the 1986–87 field season, Antarctica. F. NISHIO, H. OHMAE, K. MORI, K. OSADA and S. URAZUKA.
2. Preliminary identification of new Antarctic meteorites collected by Japanese party in 1986–87 field season. K. YANAI and H. KOJIMA.
3. Mechanisms of meteorite concentrations in Antarctica–A review. J. O. ANNEXSTAD.
4. Report of ANSMET US (Antarctic search for meteorites U.S.) 1986–87. K. YANAI and members of ANSMET US.
5. Investigation of dust components from dust bands from blue ice fields in the Lewis Cliff (Beardmore) area, Antarctica. C. KOEBERL, K. YANAI, W. A. CASSIDY and J. W. SCHUTT.
6. Carboxylic acids and hydrocarbons in Antarctic carbonaceous chondrites. H. NARAOKA, A. SHIMOYAMA, M. KOMIYA, H. YAMAMOTO and K. HARADA.
7. Compositional variation of phyllosilicates and formation processes in CV and CM carbonaceous chondrites. Y. MIÚRA, K. ABE and H. KOJIMA.
8. Yamato-82162: Possible first Cl carbonaceous chondrite from Antarctica. H. KOJIMA and K. YANAI.

Special Session: Lunar Meteorites and Yamato-691 E3 Chondrite (No. 9–No. 16).

9. New lunar meteorite: Yamato-793274. K. YANAI and H. KOJIMA.
10. Lunar meteorites Y-82192 and Y-82193: Geochemical and petrologic comparisons to other lunar breccias. M. LINDSTROM, R. KOROTEV, D. LINDSTROM and L. HASKIN.
11. New data for the bulk compositions of four lunar meteorites, and for an Fe-rich basaltic clast of probable VLT-mare affinity from Y-791197. P. H. WARREN and G. W. KALLEMEYN.
12. Trace elements in lunar meteorites Y-791197 and Y-82192. C. KOEBERL.
13. Cosmogenic and trapped noble gas isotopes, exposure age and terrestrial age of lunar meteorites Yamato-82192 and -82193. O. EUGSTER.
14. Major element chemical compositions of chondrules in Y-691. Y. IKEDA.
15. Relict pyroxene and olivine in chondrules of Y-691 (EH3). M. KITAMURA, S. WATANABE and H. ISOBE.
16. Distribution of trace elements in unequilibrated enstatite chondrites. M. EBIHARA.
17. Ultraviolet spectroscopic measurement of organic extracts from carbonaceous chondrites. S. YABUSHITA and T. INAGAKI.
18. On the formation of matrix materials of unequilibrated ordinary chondrites in turbulent solar nebula: Constraints from reaction kinetics between enstatite and metallic iron. S. MATSUNAMI.
19. Mineralogical study on the matrices of Yamato-790448 and a few chondrites by transmission electron microscope. H. SATO, H. MORI and H. TAKEDA.
20. A subsilicic aluminian pyroxene pair in a fragment of Y-82308 (H3). S. WATANABE and N. MORIMOTO.
21. Petrology of unique Antarctic chondrites, Y-74025 and Y-74063. M. KIMURA.
22. Texture and chemical composition of pyroxenes in ordinary chondrites. T. NOGUCHI.
23. Fe-Mg homogenization of pyroxenes in ordinary chondrites. A. TSUCHIYAMA, T. FUJITA and N. MORIMOTO.
24. Compositional characteristics of plagioclase feldspar in various chondritic meteorites. Y. MIÚRA.
25. The composition of spinels in the Julesburg (L3) meteorite. A. L. GRAHAM.
26. Studies on metallic minerals in ALH-77231 by X-ray diffraction and S.E.M. T. NISHIDA.
27. Yamato-8451: Newly identified pyroxene bearing pallasite. K. YANAI and H. KOJIMA.
28. Mineral and lithic clasts in the EET 83309 polymict ureilite: Evidence for primitive origins. M. PRINZ, M. K. WEISBERG, C. E. NEHRU and J. S. DELANEY.
29. On the pairing of Antarctic ureilites with reference to their parent body. H. TAKEDA and H. OGATA.
30. Mineralogy of Yamato-79 and -82 achondrites and their parent body. T. AOYAMA and H. TAKEDA.

31. Experimental studies on vaporization and condensation in the system Mg_2SiO_4-SiO_2-H_2 at low pressures: Application to the solar nebula processes. I. KUSHIRO and B. O. MYSEN.
32. An electron microscopic study of gas condensates in the system Mg-Si-O-H. A. TSUCHIYAMA, I. KUSHIRO and N. MORIMOTO.
33. Vaporization and condensation experiments on olivine solid solution system. H. NAGAHARA, I. KUSHIRO, B. O. MYSEN and H. MORI.
34. Crystal structure of perryite. A. OKADA, T. ITO, K. KOBAYASHI and T. SAKURAI.
35. Melting of peridotite under very high pressure-II: A laboratory simulation for early evolution of the earth. E. TAKAHASHI and E. ITO.
36. Compositional comparisons of some CO, CV and metamorphosed carbonaceous chondrites from Allan Hills. G. W. KALLEMEYN.
37. Chemical composition of fusion crusts on Antarctic chondrites. Y. TAZAWA and T. SASAKI.
38. Distribution of trace elements in the rim-core of Tieschitz (H3) chondrules and the matrix. H. NAGAMOTO, N. NAKAMURA, Y. NISHIKAWA, K. MISAWA and S. NODA.
39. Meteoritic components in sediments collected from impact crater, Arizona. T. FUKUOKA, Y. TAZAWA and H. NAGASAWA.
40. Rare earth elements in chondrules from the Felix (CO3) chondrite: Comparison with the Allende (CV3) chondrules. K. MISAWA and N. NAKAMURA.
41. The correlation of chondrule texture and magnesium isotope abundance. C. UYEDA, M. SUZUKI and J. OKANO.
42. The Rb-Sr systematics for diogenites. K. TAKAHASHI, H. SHIMIZU and A. MASUDA.
43. Scandium 45 in Antarctic iron meteorites. M. HONDA, H. NAGAI, M. TAKAHASHI and S. AKIZAWA.

Special Lecture

44. The origin of tektites: A geochemical discussion. C. KOEBERL.

45. Aluminum 26 and beryllium 10 in meteoritic irons. H. NAGAI, M. IMAMURA, K. KOBAYASHI, T. KOBAYASHI and M. HONDA.
46. ^{40}Ar-^{39}Ar age of an L7 clast-bearing chondrite Y-75097 (L6) and the effect of collision on degassing. I. KANEOKA, N. TAKAOKA and K. YANAI.
47. ^{14}C ages of Yamato and Allan Hills meteorites. R. P. BEUKENS, J. C. RUCKLIDGE and Y. MIURA.
48. Noble gases in Belgica-7904 carbonaceous chondrite. K. MATSUBARA, K. NAGAO and J. MATSUDA.
49. Rare gas isotopic composition of achondrites from Antarctica. K. NAGAO.
50. Noble gas analysis of Yamato-74013 (Di). N. TAKAOKA.
51. Comparison between terrestrial Xe and Xe in carbonaceous meteorites: Constraints on the early history of the Earth. G. IGARASHI and M. OZIMA.
52. Noble gas enrichment in vapor growth diamonds and the origin of diamonds in meteorites. K. FUKUNAGA, J. MATSUDA, K. NAGAO, M. MIYAMOTO and K. ITO.
53. Solar type He and Ne in diamonds. M. OZIMA and S. ZASHU.
54. $^3He/^4He$ ratios in a sedimentary rock from K-T boundary, Hokkaido and in Fig Tree shales. S. AMARI, M. OZIMA and Y. HAMANO.
55. Isolated olivines in Y-82042 (C2): Fractional condensation? G. KURAT, M. MAYR, Th. NTAFLOS and A. L. GRAHAM.
56. Hydration bands around 3 μm and weathering of meteorites. M. MIYAMOTO.
57. Orbit of the Allende meteorite—Is the Allende meteorite an extinct cometary nucleus?— T. MATSUI and E. TAJIKA.
58. Magnetic susceptibility anisotropy and porosity of chondrites: A review. N. SUGIURA and D. SNEYD.
59. Hysteresis and NRM properties of meteorites. N. SUGIURA and D. W. STRANGWAY.
60. Magnetic and metallographical studies of Bocaiuva iron meteorite. M. FUNAKI, I. TAGUCHI, J. DANON and T. NAGATA.
61. Magnetic analysis of Antarctic stony meteorites on the basis of magnetic coercivity. T. NAGATA.

Special Lecture

62. Terrestrial ages of Antarctic meteorites and ice. J. R. ARNOLD.